

**ENGINEERING AND RELATED SERVICES
MAY 18, 2012**

**CONTRACT NO. 4400002717
RETAINER CONTRACT FOR
BRIDGE RATING
STATEWIDE**

Under Authority granted by Title 48 of Louisiana Revised Statutes, the Louisiana Department of Transportation and Development (DOTD) hereby issues a Request for Qualification Statements (RFQ) on DOTD Form 24-102 (24-102), "Professional Engineering and Related Services", revised November 2011, from Consulting Firms (Consultant) to provide engineering and related services. **All requirements of Louisiana Professional Engineering and Land Surveying (LAPELS) Board must be met at the time of submittal.** One Prime-Consultant/Sub-Consultant(s) (Consultant/Team) will be selected for this Contract.

Project Manager – Ms. Dana Feng, P.E.

All inquiries concerning this advertisement should be sent in writing to Alan.Dale@LA.gov.

PROJECT DESCRIPTION

The selected Consultant will primarily perform the following engineering services:

- Bridge file generation and recovery as per AASHTO MBE
- Bridge inspections and bridge evaluations (including Sampling and Testing)
- Access to man-lift, bucket truck and under bridge inspection vehicle for use by the consultant and bridge rating staff
- Bridge load rating
- Instrumentation and non-destructive testing
- Design/Rating peer review
- Bridge design for bridge rehabilitation and/or retrofit projects
- Construction engineering support

The various services will be covered under separate Task Orders. The Consultant will be required to execute each Task Order, which will specify the scope of services, contract time, and compensation. Each Task Order will become a part of the Retainer Contract.

SCOPE OF SERVICES

The services to be rendered for this Retainer Contract shall consist of the following:

Bridge Load Rating

The scope of work for the as-designed and as-built LRFD bridge rating shall be in accordance with LADOTD's "Policies and Guidelines for Bridge Rating and Evaluations" and LADOTD Bridge Design Manuals including Bridge Design Technical Memoranda.

TASKS

Task 1: Plan and Document Retrieval and Review

Retrieve the following information and documents from the sources listed below.

Documents and Information

1. Most recent available inspection report, and as necessary previous bridge inspection reports.
2. Bridge plans – As-Built bridge plans shall be searched for from the sources listed below. If no As-Built plans can be located then As-Designed (final tracings, contract plans, etc.) shall be searched for from the sources listed below. If not plans can be located then all sources listed below shall be searched for any/all of the following:
 - Name of any standard plans used.
 - Sketches or partial drawings of the structure.
 - Any plan sheets that are available.
 - Any former rating documents. Name of engineer/firm from previous rating.
 - Name of Engineer/firm that designed the structure.
 - Name of the Entity that built the structure (State government, local government, private, special such as the core of engineers, etc.)
3. Repair Details – Any information relevant to repairs or retro fits (such as widening) that may have been done to the structure.
4. Field measurements –Any measurements taken for the structure, or load testing done on the structure.

The following sources will be used to locate the above information.

1. Louisiana Department of Transportation and Development head quarters.
 - General Files.
 - Pontis Bridge Record Database.
 - Content Manager System.
 - Section 51- Bridge Maintenance.
2. Louisiana Department of Transportation and Development district offices.
3. Local Parish governments.
4. Any engineers, firms, or fabricators whose names have been discovered from other sources (previous rating engineer, design engineer, etc.)
5. The entity who constructed the structure if it is different from the current owner.

A hard copy and an electronic copy of all retrieve information shall be delivered to the bridge rating unit of the DOTD.

Task 2: Bridge Inspection

Bridge inspection required will not be the equivalent of an NBIS bridge condition inspection. The inspection will be only for assisting the rating engineer in evaluating the condition of the bridge in order to produce a better load rating, or (b) to take field measurements necessary for bridge rating or recording purposes.

- The inspection shall be supervised by a registered licensed engineer who is involved in the bridge rating of the structure.
- Any equipment need for the inspection shall be arranged for by the consultant, and approved by the DOTD.
- All bridge inspections shall be summarized in a report which shall include pictures, and documentation of any field measurements taken.
- Copies of all reports and other documents shall be submitted to the DOTD as both hard copy and electronic files.
- Copies of all pictures take in the bridge inspection shall be electronically submitted to the DOTD.

Task 3: Analysis and Load Rating

Modeling and Analysis

Perform a system structural model and analysis of the bridge to determine dead load and live load forces in the members. Three-dimensional structural model may be needed for complex bridges.

- The dead load analysis to consider present condition of the bridge.
- Live load analysis should include design loads, legal loads, and routine overload permits.
 1. Design Live Loads: HL-93, LADV-11
 2. DOTD State Legal Loads
 3. DOTD Routine Permit Vehicles
- Secondary and temperature effects may need to be considered.

Load Rating

The Rating is to be based on the present condition, capacity and loading of the bridge.

Rate all structures using the load rating provisions in the Current AASHTO *Manual for Bridge Evaluation* and the LaDoTD *Policies and Guidelines for Bridge Rating and Evaluation*.

Task 4: Perform Quality Assurance and Quality Control Reviews of Structural Load Ratings

This task does not replace the requirement of the consultant to perform quality assurance and quality control (QA/QC) of all their work as described below in the section entitled “QUALITY CONTROL/QUALITY ASSURANCE”

As needed the consultant will be task to do “peer review” ratings, and other reviews of ratings performed by others. If needed the scope of these services will be further defined in the task order.

Task 5: Generate Repair Strategies and Plan Documents for Bridges

The scope of services, compensation and contract time for future engineering services will be established by task order for this task.

Task 6: Sampling, Instrumentation and Non-destructive Testing

The task may consist of the collection of samples of existing materials for evaluation to determine the properties.

Diagnostic tests and proof test may require to be performed to determine certain response characteristics of the bridges to analytically computing the load rating of a bridge. Instrumentation would include (not limited to) the following:

- Field Instrumentation
- Data acquisitions and communications
- Web hosting for data collection
- Instrumentation maintenance
- Centralized data warehouse support
- Instrumentation consultation

- Data acquisition software updates
- Instrumentation calibration

Project Submittal Requirements

Project submittals shall be determined in each task order. All bridge plans, bridge file information, and bridge rating reports submittals except the 100% Final submittal shall be submitted in pdf format. The 100% signed final submittal shall be submitted both in hard copy and in pdf format. Project-wise shall be utilized for all pdf submittals.

Design/Rating Software Requirement

A list of pre-approved commercially available software is posted on the bridge design website at the following location:

http://www.dotd.la.gov/highways/project_devel/design/bridge_design/documents.aspx?key=2

If any other software is needed, a synopsis of the software and influence surface/line result shall be submitted to the State Bridge Rating Engineer for approval prior to use. The synopsis shall include the name of the software and the developer, a general description of the functions, a certification from the software developer stating that it is maintained in accordance with the latest AASHTO LRFD Bridge Design Specifications, and an account of the requester's experience and the experience of other organizations or agencies that use the software. Data/results from in-house software will not be accepted as part of the deliverable.

REFERENCES

All services and documents will meet the standard requirements as to format and content of the DOTD; and will be prepared in accordance with the latest applicable editions, supplements and revisions of the following:

1. AASHTO LRFD Design Specifications
2. AASHTO Manual for Bridge Evaluation
3. AASHTO LRFD Moveable Highway Bridge Design Specifications
4. AASHTO Roadside Design Guide
5. AASHTO Standard Specifications for Structural Supports of Highway Signs, Luminaries, and Traffic Signals
6. ASTM Standards or DOTD Test Procedures
7. DOTD Location and Survey Manual
8. DOTD Roadway Design Procedures and Details
9. DOTD Hydraulics Manual
10. Louisiana Standard Specifications for Roads and Bridges
11. Manual of Uniform Traffic Control Devices (MUTCD)
12. DOTD Traffic Signal Design Manual
13. National Environmental Policy Act (NEPA)

14. National Electric Safety Code
15. National Electric Code (NFPA 70)
16. DOTD Environmental Impact Procedures (Vols. I-III)
17. Policy on Geometric Design of Highways and Streets
18. Construction Contract Administration Manual
19. Materials Sampling Manual
20. DOTD Bridge Design Manual and LRFD Bridge Design Manual
21. DOTD Bridge Design Technical Memorandums
22. Consultant Contract Services Manual
23. Geotechnical Engineering Services Document
24. Bridge Inspectors Reference Manual
25. DOTD “A Guide to Constructing, Operating, and Maintaining Highway Lighting Systems”

COMPENSATION

Compensation to the Consultant for services rendered in connection with each TO shall be based on negotiated work-hours using DOTD established billable rates for the actual work performed on the Task Order.

The amount payable under this Retainer Contract for services to be performed under the various TO's shall not exceed a maximum of **\$3,000,000**. Each TO shall be payable under the respective TO project number which shall be obtained by the Project Manager.

All travel related expenses will be compensated under direct expenses, and will be in accordance with Louisiana Office of State Travel regulations found at: <http://www.doa.louisiana.gov/osp/travel/travelpolicy.htm>. Vehicle rental rates will require prior approval from the DOTD Project Manager.

CONTRACT TIME AND NOTICE TO PROCEED

This Retainer Contract shall be in effect for the duration of **four years**. The services to be performed for each Task Order (TO) will be determined prior to the execution of the TO. The Consultant will proceed with the services required in the TO upon issuance of the Notice to Proceed from the DOTD. The contract time for each TO, will be specified in the executed TO. Any TO in effect, prior to the expiration date of the Retainer Contract shall be completed.

ELECTRONIC DELIVERABLES

The Consultant hereby agrees to produce electronic deliverables in conformance with “DOTD Software and Deliverable Standards for Electronic Plans” as outlined at http://www.dotd.louisiana.gov/highways/project_devel/design/electronic_standards_disclaimer.asp. The Consultant shall download and apply the latest CAD standards. The Consultant hereby agrees to install incremental updates to software and CAD standards as instructed by the Project Manager. Such updates will not have a significant impact on the development time or delivery date for project plans, or require the Consultant to purchase

additional software. Prior to proceeding with plan development, the Consultant shall contact the Project Manager for any special instructions regarding updates to standards or project-specific requirements if this information has not already been provided.

In the event that any electronic standard conflicts with written documentation, including DOTD plan-development manuals, the electronic standard typically governs. The Consultant is responsible for contacting the Project Manager should questions arise.

Plan deliveries shall be made on CD or DVD media and labeled with media-compatible indelible ink on separate lines as follows:

State Project Number

“Final Plans Submittal”, “60% ACP Submittal” (or other milestone)

“Electronic Deliverables”

Consultant Firm Name

The CD/DVD shall be delivered with a signed cover letter that includes, among the formalities, a deliverable “hash” code that is documented in a report generated by the ControlCAD Indexer Submittal tool. The hash code is used to verify that the CD is authentic. At any stage of the plan development process, the Project Manager may require plan delivery by other methods including, but not limited to, upload to the DOTD ProjectWise repository.

The prime Consultant is responsible for ensuring that Sub-Consultants are prepared to produce electronic deliverables in conformance with DOTD electronic standards for plans.

QUALITY CONTROL/QUALITY ASSURANCE

The DOTD requires the Consultant to develop a Quality Control/Quality Assurance program or adopt DOTD's program; in order to provide a mechanism by which all construction plans can be subject to a systematic and consistent review. Consultant's must ensure quality and adhere to established design policies, procedures, standards and guidelines in the preparation and review of all design products. The DOTD shall provide limited input and technical assistance to the Consultant. The Consultant's plans shall meet or exceed DOTD's Construction Plans Quality Control / Quality Assurance Manual and EDSM No. Volume I. 1.1.24 on Plan Quality. The Consultant shall transmit plans with a DOTD Quality Control/Quality Assurance Checklist, Documentation Manual for Project Delivery, and a certification that the plans meet the DOTD's quality standards.

ITEMS TO BE PROVIDED BY DOTD

- Traffic Data
- Standard Plans
- As-built plans if available
- Bridge Shop Drawings if available
- Bridge Maintenance File and Inspection Reports if available
- Bridge Load Rating Reports if available
- Access to Virtis input tables for the On-System Bridges

- DOTD rating guidelines

MINIMUM PERSONNEL REQUIREMENTS

The following requirements must be met at the time of submittal:

1. At least one Principal of the Prime-Consultant must be a Professional Engineer registered in the State of Louisiana.
2. At least one Principal or other responsible member of the Prime-Consultant must be a Professional Civil Engineer registered in the State of Louisiana, with at least 10 years experience in the use of the Louisiana Standard Specifications for Roads and Bridges and the Louisiana DOTD Bridge Design Manual, and have a corresponding support staff with the following minimum experience:
 - a. One Professional Civil Engineer registered in the State of Louisiana, with 10 years of experience in reinforced concrete and pre-stressed concrete bridges, steel plate girders, fender and pier protection systems, bridge scour repairs, bridge bearings, and bridge expansion joint repairs.
 - b. Two Professional Civil Engineers registered in the State of Louisiana, with 2 years of bridge rating experience, and at least 1 year of experience using Virtis load rating software.
3. In addition to the above requirements, the Prime-Consultant must employ on a full time-basis, or through the use of a Sub-Consultant(s):
 - a. One Professional Civil Engineer registered in the State of Louisiana, with 10 years of experience in complex bridge design/rating such as truss bridges, movable bridges, cable stay bridges and segmental bridges, etc.
 - b. One Professional Engineer with a Doctorate or Masters degree in Civil Engineering registered in the State of Louisiana, with 5 years of experience in non-destructive load testing of bridge structures.

Certifications of Compliance must be submitted with and made part of the Consultants DOTD Form 24-102 for all Personnel Requirements listed herein.

EVALUATION CRITERIA

The general criteria to be used by DOTD (when applicable) in evaluating responses for the selection of a Consultant to perform these services are:

1. Consultant's firm experience on similar projects, weighting factor of 5;
2. Consultant's personnel experience on similar projects, weighting factor of 5;
3. Consultant's firm size as related to the estimated project cost, weighting factor of 3; ***
4. Consultant's past performance on similar DOTD projects, weighting factor of 6; **
5. Consultant's current work load, weighting factor of 5; ****
6. Location where the work will be performed, weighting factor of 3. *

*Location will be based from Marksville, Louisiana.

**The Bridge Rating (RT) performance rating will be used for this project.

***All respondents will receive no less than a 2 in this category.

****All respondents will receive a 4 in this category.

Complexity level (**complex**)

Consultants will be evaluated as indicated in Items 1- 6. The evaluation will be by means of a point-based rating system. Each of the above criteria will receive a rating on a scale of 0-4. Then the rating will be multiplied by the corresponding weighting factor. The firm's ratings in each category will then be added to arrive at the Consultant's final rating.

If Sub-Consultants are used, the Prime Consultant must perform a minimum of 51% of the work for the overall project. Each member of the Consultant/Team will be evaluated on their part of the contract, proportional to the amount of their work. The individual team member ratings will then be added to arrive at the Consultant/Team rating.

Communication Protocol

DOTD's Project Evaluation Team will be responsible for performing the above described evaluation, and will present a short-list of the three (if three are qualified) highest rated Consultants to the Secretary of the DOTD. The Secretary will make the final selection.

Below are the proposed Team members. DOTD may substitute for any reason provided the members meet the requirements of R.S. 48:291.

1. Alan Dale – Ex officio
2. Dana Feng – Project Manager
3. Hossein Ghara
4. Artur D'Andrea
5. William Metcalf
6. Ching Tsai

Rules of Contact (Title 48 Engineering and Related Services)

These rules are designed to promote a fair, unbiased, legally defensible selection process. The LA DOTD is the single source of information regarding the Contract selection. The following rules of contact will apply during the Contract selection process and will commence on the date of advertisement and cease at the contract execution by the selected firm. Contact includes face-to-face, telephone, facsimile, Electronic-mail (E-mail), or formal written communications. Any contact determined to be improper, at the sole discretion of the LA DOTD, may result in the rejection of the submittal (24-102):

- A. The Consultant shall correspond with the LA DOTD regarding this advertisement only through the LA DOTD Consultant Contracts Services Administrator;
- B. The Consultant, nor any other party on behalf of the Consultant, shall not contact any LA DOTD employees, including but not limited to, department heads; members of the evaluation teams; and any official who may

participate in the decision to award the contract resulting from this advertisement except through the process identified above. Contact between Consultant organizations and LA DOTD employees is allowed during LA DOTD sponsored one-on-one meetings;

- C. Any communication determined to be improper, at the sole discretion of the LA DOTD, may result in the rejection of submittal, at the sole discretion of the LA DOTD;
- D. Any official information regarding the project will be disseminated from the LA DOTD'S designated representative on the LA DOTD website. Any official correspondence will be in writing;
- E. The LA DOTD will not be responsible for any verbal exchange or any other information or exchange that occurs outside the official process specified herein.

By submission of a response to this RFQ, the Consultant agrees to the communication protocol herein.

CONTRACT REQUIREMENTS

The selected Consultant will be required to execute the contract within 10 days after receipt of the contract.

INSURANCE - During the term of this contract, the Consultant will carry professional liability insurance in the amount of \$1,000,000. This insurance will be written on a "claims-made" basis. Prior to executing the contract, the Consultant will provide a Certificate of Insurance to DOTD showing evidence of such professional liability insurance.

AUDIT - The selected Consultant will allow the DOTD Audit Section to perform an annual overhead audit of their books, or provide an *independent* Certified Public Accountant (CPA) audited overhead rate. This rate must be developed using Federal Acquisition Regulations (FAR) and guidelines provided by the DOTD Audit Section. In addition, the Consultant will submit semi-annual labor rate information, when requested by DOTD.

The selected Consultant will maintain, an approved Project Cost System and segregate direct from indirect cost in their General Ledger. Pre-award and post audits, as well as interim audits, may be required. For audit purposes, the selected Consultant will maintain accounting records for a minimum of five years after final contract payment.

Any Consultant currently under contract with the DOTD and who has not met all the audit requirements documented in the manual and/or notices posted on the DOTD Consultant Contract Services Website (www.dotd.louisiana.gov), will not be considered for this project.

SUBMITTAL REQUIREMENTS

One original (**stamped “original”**) and **five** copies of the DOTD Form 24-102 must be submitted to DOTD. All submittals must be in accordance with the requirements of this advertisement and the Consultant Contract Services Manual. Any Consultant/Team failing to submit any of the information required on the 24-102, or providing inaccurate information on the 24-102, will be considered non-responsive.

Any Sub-Consultants to be used, including Disadvantaged Business Enterprises (DBE), in performance of this Contract, must also submit a 24-102, which is completely filled out and contains all information pertinent to the work to be performed.

The Sub-Consultant's 24-102 must be firmly bound to the Consultant's 24-102. In Section 9, the Consultant's 24-102 must describe the **work elements** to be performed by the Sub-Consultant(s), and state the approximate **percentage** of each work element to be subcontracted to each Sub-Consultant.

Name(s) of the Consultant/Team listed on the 24-102, must precisely match the name(s) filed with the Louisiana Secretary of State, Corporation Division, and the Louisiana State Board of Registration for Professional Engineers and Land Surveyors.

The 24-102 will be identified with **Contract No. 4400002717**, and will be submitted **prior to 3:00 p.m. CST on Monday, June 11, 2012**, by hand delivery or mail, addressed to:

Department of Transportation and Development
Attn.: Mr. Alan Dale, P.E.
Consultant Contract Services Administrator
1201 Capitol Access Road, **Room 405-T**
Baton Rouge, LA 70802-4438 or
Telephone: (225) 379-1401

REVISIONS TO THE RFQ

DOTD reserves the right to revise any part of the RFQ by issuing an addendum to the RFQ at any time. Issuance of this RFQ in no way constitutes a commitment by DOTD to award a contract. DOTD reserves the right to accept or reject, in whole or part, all Qualification Statements submitted and/or cancel this announcement if it is determined to be in DOTD's best interest. All materials submitted in response to this announcement become the property of DOTD and selection or rejection of a submittal does not affect this right. DOTD also reserves the right, at its sole discretion, to waive administrative informalities contained in the RFQ.